U.S. Serial No.: 10/651,668 Filing Date: August 28, 2003

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A composition comprising a protein in crystalline form, wherein the protein consists of residues 1-314 of SEQ ID NO:1, wherein said protein forms a complex with a bisphosphonate or isoprenoid ligand, and wherein the protein crystal has a crystal lattice in a P4₁22 space group and unit cell dimensions, +/- 5%, of a=88.80Å b=88.80Å and c=174.99Å, $\alpha=\beta=\gamma=90$.

2-3. (Canceled)

- 4. (Previously Presented) A composition according to claim 1 wherein the protein crystal diffracts X-rays for a determination of structure coordinates to a resolution of a value equal to or less than 3.0 Angstroms.
- 5. (Canceled)
- (Currently Amended) A method for forming a crystal of a protein comprising:
 forming a crystallization volume comprising a precipitant solution and a protein that consists of

forming a crystallization volume comprising a precipitant solution and a protein that consists of residues 1-314 of SEQ ID NO:1, wherein said protein forms a complex with a <u>bisphosphonate or isoprenoid</u> ligand; and

storing the crystallization volume under conditions suitable for formation of a protein crystal, wherein the protein crystal has a crystal lattice in a P4₁22 space group and unit cell dimensions, +/- 5%, of a=88.80Å b=88.80Å and c=174.99Å, α = β = γ =90.

7-8. (Canceled)

9. (Previously Presented) A method according to claim 6 wherein the protein crystal diffracts X-rays for a determination of structure coordinates to a resolution of a value equal to or less than 3.0 Angstroms.

10-17. (Canceled)

U.S. Serial No.: 10/651,668 Filing Date: August 28, 2003

- 18. (Previously Presented) The method according to claim 6 comprising: diffracting the protein crystal to produce a diffraction pattern; and solving the structure of the protein crystal from the diffraction pattern.
- 19. (Previously Presented) A non-crystalline protein consisting of residues 1-314 of SEQ ID NO:1.
- 20. (Canceled)
- 21. (Previously Presented) The method according to claim 18, the method further comprising: performing rational drug design using the solved structure; and identifying an entity that associates with the protein.
- 22. (Previously Presented) The method according to claim 21 further comprising selecting one or more entities based on the rational drug design and contacting the selected entities with the protein.
- 23. (Previously Presented) The method according to claim 22 further comprising measuring an activity of the protein when contacted with the one or more entities.
- 24. (Previously Presented) An isolated non-crystalline protein consisting of residues 1-314 of SEQ ID NO:1.